

**IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (previously presented) A paintable gypsum board, comprising:
  - a. a gypsum layer having a first face and a second face and comprising set gypsum; and
  - b. first and second facers affixed to said first and second faces, said first facer being a fibrous mat comprising a non-woven, glass fiber web bonded together with a resinous binder, and said glass fibers consisting essentially of chopped glass fibers having an average fiber diameter ranging from about 9.5 to 12.5  $\mu\text{m}$  and an average fiber length ranging from about 6 to 12 mm; andwherein said first facer provides said first face of said gypsum board with a smoothness that is sufficient to permit said gypsum board to be directly paintable.
2. (previously presented) A gypsum board as recited by claim 1, wherein said chopped glass fibers are composed of at least one member selected from the group consisting of E glass, C glass, T glass, sodium borosilicate glass, and mixtures thereof.

3. (previously presented) A gypsum board as recited by claim 1, wherein said chopped glass fibers are composed of E glass.
4. (currently amended) A gypsum board as recited by claim 1, wherein at least ~~about~~ 90% by weight of said chopped glass fibers have a diameter ranging between ~~about~~ 9.5 and 12.5  $\mu\text{m}$ .
5. (currently amended) A gypsum board as recited by claim 1, wherein at least ~~about~~ 95% by weight of said chopped glass fibers have a diameter ranging between ~~about~~ 9.5 and 12.5  $\mu\text{m}$ .
6. (currently amended) A gypsum board as recited by claim 1, wherein at least ~~about~~ 97% by weight of said chopped glass fibers have a diameter ranging between ~~about~~ 9.5 and 12.5  $\mu\text{m}$ .
7. (cancelled)
8. (previously presented) A gypsum board as recited by claim 1, wherein at least a majority of said chopped glass fibers have a fiber length ranging from about 6 to 18 mm.
9. (original) A gypsum board as recited by claim 1, wherein said resinous binder is composed of at least one member selected from the group consisting of urea formaldehyde; conventional modified urea formaldehyde; acrylic resin; melamine resin; high nitrogen melamine resin; homopolymer and copolymer of polyacrylic

- acid having a molecular weight of less than 10,000; crosslinking acrylic copolymer; crosslinked vinyl chloride acrylate copolymer; and modified acrylic latex binder.
10. (original) A gypsum board as recited by claim 1, wherein said resinous binder is composed of a modified acrylic latex binder.
  11. (original) A gypsum board as recited by claim 9, wherein said resinous binder further comprises a cross-linker in an amount ranging up to about 10 weight percent.
  12. (original) A gypsum board as recited by claim 11, wherein said cross linker is present in an amount ranging from about 2 to 5 weight percent.
  13. (original) A gypsum board as recited by claim 11, wherein said resinous binder comprises melamine formaldehyde.
  14. (original) A gypsum board as recited by claim 1, wherein said resinous binder has a glass transition temperature ranging from about 15 to 45°C.
  15. (original) A gypsum board as recited by claim 1, wherein said resinous binder further comprises at least one water repellant agent.
  16. (cancelled)
  17. (original) A gypsum board as recited by claim 1, wherein said fibrous mat has a basis weight ranging from about 0.6 to 2.2 pounds per 100 square feet.
  18. (original) A gypsum board as recited by claim 17, wherein said fibrous mat has a basis weight ranging from about 0.9 to 2.2 pounds per 100 square feet.

19. (original) A gypsum board as recited by claim 18, wherein said fibrous mat has a basis weight of about  $1.25 \pm 0.2$  pounds per 100 square feet.
20. (original) A gypsum board as recited by claim 1, said second facer comprising kraft paper.
21. (original) A gypsum board as recited by claim 1, said second facer comprising a fibrous mat.
22. (previously presented) A gypsum board as recited by claim 1, said second facer being a fibrous mat comprising a non-woven, glass fiber web bonded together with a resinous binder, and said glass fibers consisting essentially of chopped glass fibers having an average fiber diameter ranging from about 9.5 to 12.5  $\mu\text{m}$  and an average fiber length ranging from about 6 to 12 mm.
23. (original) A gypsum board as recited by claim 1, wherein said gypsum core further comprises at least one water repellant agent.
24. (original) A gypsum board as recited by claim 1, wherein said gypsum core further comprises reinforcing fiber.
25. (original) A gypsum board as recited by claim 1, wherein said gypsum core further comprises a biocide.
26. (original) A gypsum board as recited by claim 1, said board having flame resistance sufficient to pass the test of ASTM Method E84, Class 1.

27. (previously presented) In a gypsum board having a first face and a second face and a non-woven fibrous mat affixed to at least one of said faces, the improvement wherein said mat comprises a glass fiber web bonded together with a resinous binder and said chopped glass fibers consist essentially of glass fibers having an average fiber diameter ranging from about 9.5 to 12.5  $\mu\text{m}$  and an average fiber length ranging from about 6 to 12 mm, and mat provides said first face of said gypsum board with a smoothness that is sufficient to permit said gypsum board to be directly paintable.
28. (cancelled)
29. (cancelled)
30. (cancelled)
31. (currently amended) A gypsum board as recited by claim 1, said mat having a permeability of at least ~~about~~ 300 cfm/ft<sup>2</sup> measured by the Frazier test.
32. (previously presented) A paintable hydraulic set board, comprising:
- a. a hydraulic set material layer having a first and a second face; and
  - b. first and second facers affixed to said first and second faces, at least of said first facer being a fibrous mat comprising a non-woven, glass fiber web bonded together with a resinous binder, said glass fibers consisting essentially of chopped glass fibers having an average fiber diameter ranging from about 9.5 to 12.5  $\mu\text{m}$  and an average fiber length ranging from about 6 to 12 mm; and

wherein said first facer provides said first face of said hydraulic set board with a smoothness that is sufficient to permit said hydraulic set board to be directly paintable